

We claim:

1. An encapsulation composition comprising one or more base oligomer/polymers, one or more multifunctional acrylate monomers, and one or more thixotropic agent.
- 5 2. The encapsulation composition of claim 1, wherein the one or more multifunctional acrylate monomers comprise at least one multifunctional acrylate monomer having a cyclic structure.
3. The encapsulation composition of claim 2, wherein at least one of the one or more multifunctional acrylate monomers is a diacrylate monomer.
- 10 4. The encapsulation composition of claim 3, wherein the diacrylate monomer is selected from the group comprising tricyclodecane dimethanol diacrylate, dicyclopentenyl acrylate, dicyclopentenyl methacrylate, hydroxypivalaldehyde modified trimethylolpropane diacrylate and mixtures thereof.
- 15 5. The encapsulation composition of claim 4, wherein the diacrylate monomer is tricyclodecane dimethanol diacrylate.
6. The encapsulation composition of claim 4, wherein the one or more base oligomer/polymers comprise acrylated/methacrylated or vinylene-containing oligomer/polymers.
- 20 7. The encapsulation composition of claim 1, wherein the thixotropic agent is treated silica.
8. The encapsulation composition of claim 1, further comprising one or more photoinitiators.
9. The encapsulation composition of claim 1, further comprising one or
25 more filler materials.

10. The encapsulation composition of claim 9, wherein the one or more filler materials are selected from the group comprising spherical hollow glass beads, solid glass beads, talc, spherical silica and mixtures thereof.
11. The encapsulation composition of claim 1, further comprising one or more pigments.
12. The encapsulation composition of claim 1, further comprising one or more additives selected from the group comprising adhesion promoters, coupling agents, thermal curing agents, and mixtures thereof.
13. The encapsulation composition of claim 12, wherein the coupling agent comprises a silane.
14. The encapsulation composition of claim 1, wherein the one or more base oligomer/polymers comprises in the range of about 1 to about 75 weight percent of the composition.
15. The encapsulation composition of claim 14, wherein the one or more base oligomer/polymers comprises in the range of about 20 to about 50 weight percent of the composition.
16. The encapsulation composition of claim 1, wherein the one or more multifunctional acrylate monomer comprises in the range of about 1 to about 50 weight percent of the composition.
17. The encapsulation composition of claim 16, wherein the one or more multifunctional acrylate monomer comprises in the range of about 10 to about 30 weight percent of the composition.
18. The encapsulation composition of claim 1, wherein the thixotropic agent comprises in the range of about 0.1 to about 8 weight percent of the composition.

19. The encapsulation composition of claim 18, wherein the thixotropic agent comprises in the range of about 2 to about 5 weight percent of the composition.
20. The encapsulation composition of claim 8, wherein the one or more
5 photoinitiators comprise in the range of about 0.1 to about 8 weight percent of the composition.
21. The encapsulation composition of claim 9, wherein the one or more filler materials comprise in the range of about 1 to about 85 weight percent of the composition.
- 10 22. The encapsulation composition of claim 21, wherein the one or more filler materials comprise in the range of about 50 to about 75 weight percent of the composition.
23. An encapsulation composition according to claim 1 for use in dam and fill encapsulation.
- 15 24. An encapsulation composition according to claim 1 for use in glob top encapsulation
25. An encapsulation composition according to claim 1 for use as a fill material in dam and fill encapsulation.
26. An encapsulation composition according to claim 1 for use as a dam
20 material in dam and fill encapsulation.
27. A method of providing encapsulation on an electronic component comprising the step of applying the composition of claim 1 to an electronic component.